

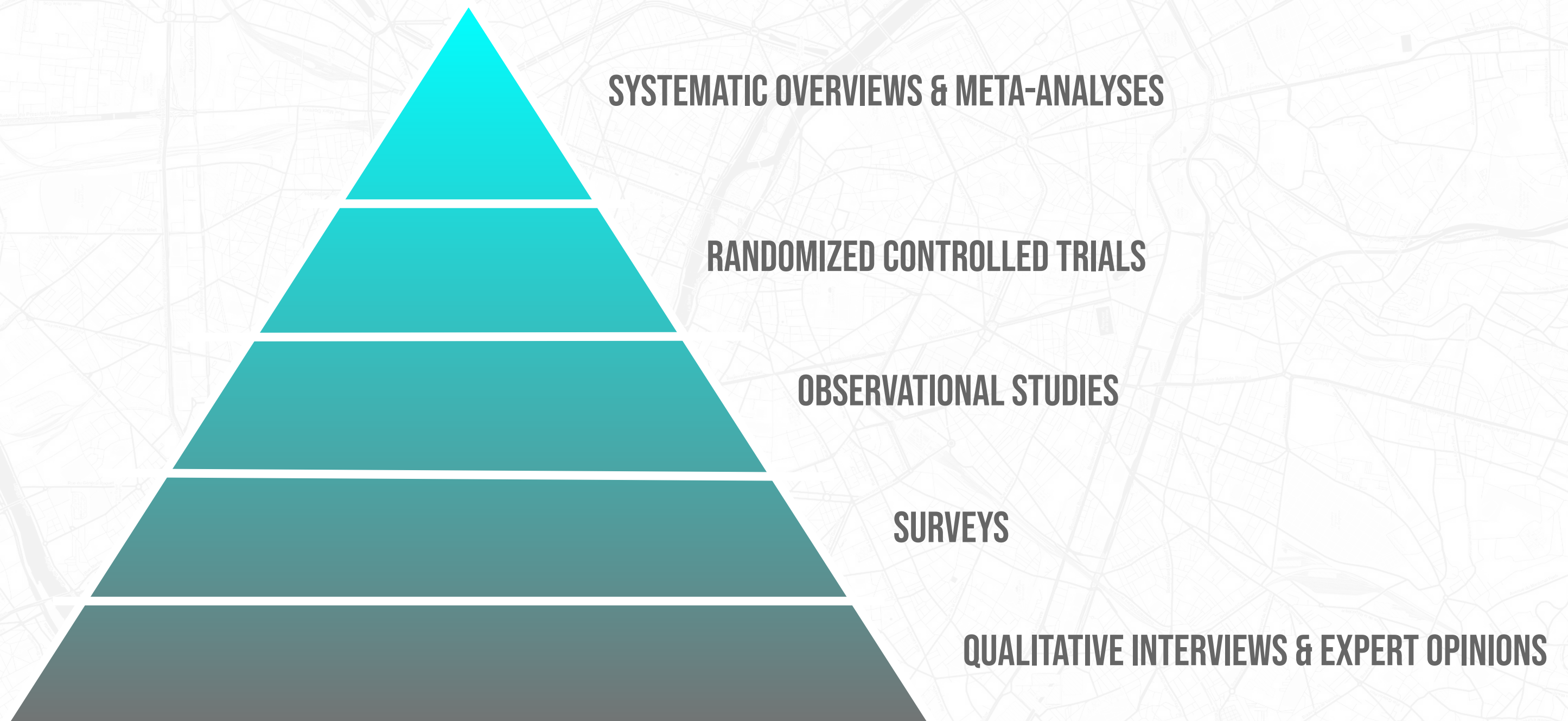
A HIERARCHY OF SCIENCE

| A very simplified overview of which studies to trust and which to examine further.



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A HIERARCHY OF SCIENCE: TYPES OF STUDIES



Systematic Overviews & Meta-Analyses

Large overviews where many smaller studies are combined to show the scientific consensus on a topic. The most rigorous type of study, but still sensitive if the researchers choose to include the wrong studies.

Randomized Controlled Trials

A study that has an intervention group receiving a treatment and a **control group** receiving a **placebo**. It should be **random** which group gets what, and the researchers and participants should not know which group they are in (**double-blind**).

Observational Studies

An umbrella term for different studies where we observe reality and try to find a pattern of causality. This is done by using data from a large number of surveys or similar sources. The problem is that this can show convincing correlations that are in fact caused by something outside of the study.

Surveys

A survey is a questionnaire usually sent to a large number of people to ask about their life or opinions. It can give valuable information, but is sensitive to the quality of the questions, the number of participants, and the selection of participants – which needs to be random and represent the entire population.

Qualitative Interviews

Similar to journalism, but more scientific in that the questions and methodology needs to be carefully described and in that the respondents are normally anonymous.

Experts' Opinions

Experts often write books or hold public presentations on questions related to their field. Remember that even experts can mix science and personal opinions, and it is hard to know which is which.